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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,638	03/06/2002	Takashi Kurumisawa	111730	6066

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EXAMINER	
NGUYEN, CHANH DUY	
ART UNIT	**PAPER NUMBER**
2675	

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental Notice of Allowability	Application No.	Applicant(s)	
	10/090,638	KURUMISAWA, TAKASHI	
	Examiner	Art Unit	
	Kent Chang	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the Interview dated 2/28*.

2. ☒ The allowed claim(s) is/are *1-16*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Philip Wrist on 2/28/06.

The application has been amended as follows:

Amend the claims as follows:

1. (Original) An electro-optical device, comprising:

a plurality of electro-optical elements;

a first substrate formed with a plurality of first electrodes that supplies a plurality of first signals to drive the plurality of electro-optical elements;

a second substrate facing the first substrate, the second substrate formed with a plurality of second electrodes that supplies a plurality of second signals to drive the plurality of electro-optical elements, the plurality of first electrodes and the plurality of second electrodes being formed in a matrix shape;

a transfer member; and

a drive circuit connected to at least one of the first substrate and the second substrate to supply the plurality of first signals and the plurality of second

signals to the plurality of first electrodes and the plurality of second electrodes, respectively, the first substrate being formed with a plurality of first wirings through which the drive circuit supplies the plurality of first signals to the plurality of first electrodes, and the second substrate being formed with a plurality of second wirings through which the drive circuit supplies the plurality of first signals to the plurality of first electrodes, the plurality of second wirings facing and being connected to the plurality of first wirings through the transfer member.

2. (Original) An electro-optical device according to claim 1, comprising:

a plurality of first wirings having wiring portions extending in parallel with each other,

a plurality of second wirings having wiring portions extending in parallel with each other; and

a face defined by the wiring portion of each of the plurality of first wirings and the corresponding wiring portion of each of the plurality of second wirings is orthogonal to each of a face defined by the wiring portions of the plurality of first wirings and a face defined by the wiring portions of the plurality of second wirings.

3. (Withdrawn) An electro-optical device according to claim 1, wherein

each first wiring and a second wiring corresponding thereto is connected via a part of the first wiring and a part of the second wiring, intervals among the part of the first wiring and parts of first wirings other than the first wiring corresponding to the

part thereof being larger than intervals among an other part of first wiring and parts of first wirings other than the first wiring corresponding to the other part thereof, and intervals among the part of the second wiring and parts of second wirings other than the second wiring corresponding to the part thereof being larger than intervals among an other part of second wiring and parts of second wirings other than the second wiring corresponding to the other part thereof.

4. (Currently Amended) An electro-optical device, comprising:

a substrate formed with a plurality of signal electrodes;

a plurality of routing wirings;

a transfer member; and

another substrate formed with a plurality of scanning electrodes facing the substrate, the plurality of signal electrodes and the plurality of scanning electrodes being arranged in a matrix shape when viewed in a plane to define image display regions, the substrate being formed with a drive circuit to drive the signal electrodes and the scanning electrodes, the drive circuit being connected to at least one of each of the signal electrodes and each of the scanning electrodes through the plurality of routing wirings formed on each of the substrates;

wherein the routing wirings to connect the drive circuit to the electrodes are formed on one of the substrates that corresponds to a picture-frame area located at the end side of the electrodes extending in one of the directions along which the plurality of electrodes are arranged in a matrix shape, routing sub-wirings are formed in

a picture-frame area on the other substrate not formed with the routing wirings so as to face the routing wirings, and the routing wirings and the routing sub-wirings facing each other on both the substrates are conducted by the transfer member laid between the substrates.

5. (Original) The electro-optical device according to claim 4, electrodes of a column side being formed on the one of the substrates, electrodes of a row side are being formed on the other of the substrates, the routing sub-wirings being formed in picture-frame areas formed on left and right sides of the one of the substrates, routing wirings for the electrodes of a row side being formed in picture-frame areas on left and right sides of the other of the substrates, the routing sub-wirings on the one of the substrates being connected to the routing wirings on the other of the substrates facing the routing sub-wirings by the transfer member, the electrodes of a column side on the one of the substrates being connected to a drive circuit through connecting wirings of a column side formed on the one of the substrates, and the routing sub-wirings on the one of the substrates being connected to a drive circuit through connecting wirings of a row side formed on the one of the substrates.

6. (Original) The electro-optical device according to claim 4, electrodes of a row side being formed on the one of the substrates, electrodes of a column side being formed on the other of the substrates, routing wirings connected to the electrodes of a row side being formed in picture-frame areas formed on left and right sides of the one of

the substrates, routing sub-wirings for the electrodes of a row side being formed in picture-frame areas formed on left and right sides of the other of the substrates, the routing wirings on the one of the substrates being connected to the routing sub-wirings on the other of the substrates facing the routing wirings by the transfer member, the electrodes of a column side on the other of the substrates being connected to a drive circuit through connecting wirings of a column side formed on the one of the substrates, and the routing wirings on the one of the substrates being connected to a drive circuit through connecting wirings of a row side formed on the one of the substrates.

7. (Original) The electro-optical device according to claim 4, picture-frame areas having an equal width being formed on left and right sides of the image display regions.

8. (Original) The electro-optical device according to claim 4, the routing sub-wirings being formed to be independent wirings not connected to any one of the electrodes on the substrate formed with the routing sub-wirings.

9. (Original) The electro-optical device according to claim 4, the transfer member including a plurality of conductive particles dispersed inside an insulating resin layer.

10. (Original) The electro-optical device according to claim 4, liquid crystals being sealed between a pair of substrates by a seal layer laid in a peripheral part of the pair of substrates, a part of an area disposed with the seal layer being formed to be a

picture-frame area disposed with the routing wirings and the routing sub-wirings, a plurality of conductive particles being dispersed inside the seal layer, and the conductive particles bringing the routing wirings and the routing sub-wirings into vertical conduction.

11. (Original) The electro-optical device according to claim 10, a gap agent to control a thickness of a liquid crystal layer being dispersed in the seal layer.

12. (Original) The electro-optical device according to claim 4, the plurality of routing wirings formed on the picture-frame areas including a routing wiring for an electrode located farther from the drive circuit that has a width greater than another routing wiring for another electrode located closer to the drive circuit, with the electrodes being connected to the drive circuit.

13. (Original) The electro-optical device according to claim 4, the signal electrodes include a pixel electrode part formed at every pixel and a two-terminal nonlinear element disposed between a signal wiring part and the pixel electrode part.

14. (Original) An electronic device, comprising:

an electro-optical device according to claim 4.

15. (Currently Amended) An electro-optical device comprising:

a plurality of electro-optical elements;

a first substrate having a ~~first~~ plurality of first electrodes connected to the plurality of electro-optical elements and a plurality of first wirings connected to the plurality of first electrodes;

a second substrate facing the first substrate and having a ~~second~~ plurality of second electrodes ~~connected to the plurality of electro-optical elements~~ and a plurality of second wirings ~~connected to the plurality of second electrodes~~, the plurality of second electrodes being connected to the plurality of electro-optical elements and forming a matrix with the plurality of first electrodes, ~~and~~ the plurality of second wirings facing the plurality of first wirings;

a seal layer provided between the first substrate and the second substrate;

a transfer member provided outside the seal layer and having a width greater than the seal layer, the transfer member being disposed between, and connected to, the plurality of first wirings and the plurality of second wirings, the transfer member including an insulating resin layer and a plurality of conductive particles dispersed inside the insulating resin layer; and

a drive circuit connected to at least one of the first substrate and the second substrate and ~~connected to the plurality of first wirings to supply~~supplying a plurality of first drive signals to the plurality of electro-optical elements via the first

wirings, the second wirings and the plurality of first electrodes, and ~~connected to the plurality of second wirings to supply~~supplying a plurality of second drive signals to the plurality of electro-optical elements via the plurality of second electrodes.

16. (Currently Amended) An electro-optical device comprising:

a plurality of electro-optical elements;

a first substrate having a first plurality of electrodes connected to the plurality of electro-optical elements and a plurality of first wirings connected to the plurality of first electrodes, wiring portions of the plurality of first wirings being arranged in parallel;

a second substrate facing the first substrate and having a ~~second~~ plurality of second electrodes ~~connected to the plurality of electro-optical elements~~ and a plurality of second wirings ~~connected to the plurality of second electrodes~~, the plurality of second electrodes being connected to the plurality of electro-optical elements and forming a matrix with the plurality of first electrodes, ~~and~~ the plurality of second wirings facing the plurality of first ~~wirings,~~wirings and including portions ~~of the second wirings being~~ arranged in parallel and overlapping the wiring portions of the plurality of first wirings;

an image display region defined where the plurality of first electrodes and the plurality of second electrodes form the matrix;

a picture frame area located outside the image display region, the plurality of first wirings and the plurality of second wirings being arranged in the picture frame area;

a transfer member disposed between, and connected to, the plurality of first wirings and the plurality of second wirings; and

a drive circuit connected to at least one of the first substrate and the second ~~substrate and connected to the plurality of first wirings to supply~~substrate, the drive circuit supplying a plurality of first drive signals to the plurality of electro-optical elements via the first wirings, the second wirings and the plurality of first electrodes, and ~~connected to the plurality of second wirings to supply~~supplying a plurality of second drive signals to the plurality of electro-optical elements via the plurality of second electrodes.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Chang whose telephone number is 571-272-7667. The examiner can normally be reached on Monday to Thursday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz, can be reached at 571-272-3638.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

571-273-8300

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Kent Chang
Primary Examiner
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kc

2/28/06